

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A system for generating anti-aliased images, comprising:
a processor configured to generate a sampling pattern covering an array of pixels for use in ~~[[an]]~~ the anti-aliasing system, where each pixel has a pattern of sample points at a mirror plane within the array of pixels, wherein the sample point pattern of each pixel is a mirror image of a directly neighboring pixel, mirrored in a mirror plane, and different from the pattern of said directly neighboring pixel, wherein the mirror planes are located on the edges of the pixel, and the pattern has one sample point per pixel mirror plane, and wherein pixel values derived from said sample points are displayed on a screen.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The ~~sampling pattern~~ system according to claim 1, wherein the (x, y) coordinates of the sample points for a pixel are related according to

(0, a), (a, 1), (b, 0), and (1, b), and the (x, y) coordinates of the sample points for a neighboring pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).

5. (Cancelled)

6. (Currently Amended) The ~~sampling pattern~~ system according to claim 4, wherein the sum "a+b" equal to 1.

7. (Currently Amended) The ~~sampling pattern~~ system according to claim 4, wherein $a = 1/3$ and $b = 2/3$.

8. (Currently Amended) The use of a system according to claim 1 in a pixel anti-aliasing system.

9. (Currently Amended) The use of a system according to claim 8 for processing a still image.

10. (Currently Amended) The use of a system according to claim 8 for processing a video sequence.

11. (Currently Amended) A method for creating a sampling pattern covering an array of pixels for use in an anti-aliasing system, ~~where~~ the method comprising:

_____ providing each pixel ~~has~~ with a pattern of sample points at the edges of the pixel_{[[,]]_i and}

_____ defining the sample point pattern of each pixel so that it is a mirror image of a directly neighboring pixel, mirrored in a mirror plane, and different from the sample point pattern of said directly neighboring pixel, wherein the mirror planes are located on the edges of the pixel, and the pattern has one sample point per pixel edge, and displaying pixel values derived from said sample points on a screen.

12. (Cancelled)

13. (Previously Presented) The method according to claim 11, wherein the (x, y) coordinates of the sample points for a pixel are related according to (0, a), (a, 1), (b, 0), and (1, b), and the (x, y) coordinates of the sample points for a neighboring pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).

14. (Cancelled)

15. (Previously Presented) The method according to claim 13, wherein the sum "a+b" is equal to 1.

16. (Previously Presented) The method according to claim 13, wherein a = 1/3 and b = 2/3.

17. (Currently Amended) [[An]] A system for generating anti-aliased images,
comprising:
_____ a processor configured to generate an anti-aliased image created by a sampling
pattern covering an array of pixels for use in [[an]] the anti-aliasing system, where each
pixel has a pattern of sample points at the edges of the pixel, and defining the sample
point pattern of each pixel so that it is a mirror image of a directly neighboring pixel,
mirrored in a mirror plane, and different from the sample point pattern of said directly
neighboring pixel, wherein the mirror planes are located on the edges of the pixel, and
the pattern has one sample point per pixel edge, wherein pixel values derived from said
sample points are displayed on a screen.

18. (Currently Amended) An anti-aliasing system comprising a GPU, wherein
the GPU is adapted to define a pattern of sample points at the edges of a pixel, wherein
the GPU is adapted to define the sample point pattern of each pixel so that it is a mirror
image of a directly neighboring pixel, mirrored in a mirror plane, and different from the
pattern of said directly neighboring pixel, wherein the mirror planes are located on the
edges of the pixel, and the pattern has one sample point per pixel edge, wherein pixel
values derived from said sample points are displayed on a screen, and wherein the
GPU is implemented in hardware.

19. (Cancelled)

20. (Cancelled)

21. (Previously Presented) The system according to claim 18, wherein the (x, y) coordinates of the sample points for a pixel are related according to (0, a), (a, 1), (b, 0), and (1, b), and the (x, y) coordinates of the sample points for a neighboring pixel are related according to (0, b), (a, 0), (b, 1), and (1, a).

22. (Cancelled)

23. (Previously Presented) The system according to claim 21, wherein the sum "a+b" is equal to 1.

24. (Previously Presented) The system according to claim 21, wherein $a = 1/3$ and $b = 2/3$.

25. (Currently Amended) ~~A computer program product directly loadable into an internal memory~~ computer-readable medium storing computer executable instructions associated with a CPU, said CPU being operatively coupled to a GPU for defining a pattern of sample points at the edges of a pixel, ~~comprising program code for~~ the instructions when executed by the CPU:

defining the sample point pattern of each pixel so that it is a mirror image of a directly neighboring pixel, mirrored in a mirror plane, and different from the sample point pattern of said directly neighboring pixel, wherein the mirror planes are located on the edges of the pixel, and the pattern has one sample point per pixel edge $[[,]]_i$; and

~~program code for displaying~~ pixel values derived from said sample points on a screen.

Claim 26 (Cancelled).

27. (Currently Amended) The ~~sampling pattern~~ system according to claim 1, wherein the pattern has one and only one sample point per pixel mirror plane.

28. (Currently Amended) The ~~sampling pattern~~ system according to claim 4, wherein $a = 2/3$ and $b = 1/3$.

29. (Currently Amended) The ~~sampling pattern~~ method according to claim 11, wherein the pattern has one and only one sample point per pixel mirror plane.

30. (Previously Presented) The method according to claim 13, wherein $a = 2/3$ and $b = 1/3$.

31. (Previously Presented) The system according to claim 21, wherein $a = 2/3$ and $b = 1/3$.

32. (New) A computer-readable medium storing computer executable instructions, which when executed by a GPU define a pattern of sample points at the edges of a pixel, the medium comprising instructions for:

defining the sample point pattern of each pixel so that it is a mirror image of a directly neighboring pixel, mirrored in a mirror plane, and different from the pattern of said directly neighboring pixel;

locating the mirror planes on the edges of the pixel, and the pattern has one sample point per pixel edge; and

displaying on a screen pixel values derived from said sample points, wherein the GPU is implemented in software.

33. (New) The medium of Claim 32, wherein the (x, y) coordinates of the sample points for a pixel are related according to $(0, a)$, $(a, 1)$, $(b, 0)$, and $(1, b)$, and the (x, y) coordinates of the sample points for a neighboring pixel are related according to $(0, b)$, $(a, 0)$, $(b, 1)$, and $(1, a)$.

34. (New) The medium of Claim 32, wherein the sum " $a+b$ " is equal to 1.

35. (New) The medium of Claim 32, wherein $a = 1/3$ and $b = 2/3$.